REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested. Currently, claims 1-31 are pending in this application.

Allowable Subject Matter:

The Office Action indicates that claims 25-26 and 29-31 are allowable.[1] The Office Action also indicates that claims 6, 9, 10, 15, 17 and 24 would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Claims 6, 9, 10, 15, 17 and 24 have been maintained herein.

Rejection Under 35 U.S.C. §103:

Claims 1-5, 7-8, 11-14, 16, 18-23 and 27-28 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Feder et al (U.S. 2002/0089958, hereinafter "Feder") in view of Loehndorf, Jr. et al (U.S. '437, hereinafter "Loehndorf"). Applicant respectfully traverses this rejection.

In order to establish a prima facie case of obviousness, all of the claim limitations must be taught or suggested by the prior art. The combination of Feder and Loehndorf fails to teach or suggest all of the claim limitations. For example, the combination fails to teach or suggest "by a routing defining process involving transmitting directed routing update messages to a limited number of said packet switching nodes, said second routing protocol data specifying a characteristic of a second route passing through said second access node, such that said first routing protocol data is held in a first set of packet switching nodes, and said second routing protocol data is held in a second set of packet

[1] While claim 31 was indicated as being allowable, base claim 28 (i.e., claim 31 depends from claim 28) was indicated as being rejected. Applicant thus respectfully requests clarification.

switching nodes, different to said first set of packet switching nodes, so that the first and second routes co-exist in the packet switching network," as required by independent claim 1. Similar comments apply independent claims 27 and 28.

In the present invention, first routing protocol data for a network address used by a mobile node is initially generated. This first routing protocol data specifies a characteristic of a first route passing through a first access node that serves the mobile node. Subsequently, in response to the mobile node receiving service from a second access node, second routing protocol data for the network address is generated by a routing defining process involving transmitting directed routing update messages to only a limited number of the packet switching nodes in the network. This second routing protocol data specifies a characteristic of a second route passing through the second access node. The first routing protocol data is held in a first set of packet switching nodes, while the second routing protocol data is held in a second set of packet switching nodes that is different from the first set.

The limited propagation of routing control messages ("*routing defining process involving transmitting directed routing update messages to a limited number of said packet switching nodes*" as required by independent claim 1 and its dependents) and the co-existence of the first and second routes ("*first routing protocol data is held in a first set of packet switching nodes, and said second routing protocol data is held in a second set of packet switching nodes, different to said first set of packet switching nodes, so that the first and second routes co-exist in the packet switching network*" as required by independent claim 1 and its dependents) results in reduced signalling loading. This is the case in particular when a mobile node frequently crosses the same border between cells.

None of the above noted claimed features are taught or suggested by the combination of Feder and Loehndorf. For example, the routing defining process to generate second routing protocol data is not taught or suggested by this combination. In Feder, if an end system moves from one base station to another, a new XTunnel is created between the new base station and the original IWF while the old XTunnel from the old base station will be deleted. (See paragraph [0067] of Feder). Feder thus teaches away from the co-existence of new and old tunnels.

With respect to dependent claim 23, Section 5 of the Office Action states "In Feder the routing protocol is a link reversal routing protocol (fig. 3, note: bidirectional tunnel links; para. 71, last six lines)." This statement expresses a misunderstanding of link reversal mobility protocol. The Office Action apparently expresses the understanding that this means packets can go along the same path in both directions. However, link reversal algorithms provide a simple mechanism for routing in mobile ad hoc networks. These algorithms maintain routes to any particular destination in the network, even when the network topology changes frequently. In link reversal, a node reverses its incident links whenever it loses routes to the destination.

Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. §103 be withdrawn.

Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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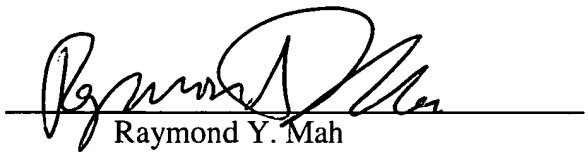
By: 
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